

REMARKS

Status of the Claims

All pending claims 1-23 have been rejected.

Claim Rejections under 35 USC § 103

As indicated in the Office Action, Claims 1-23 have been rejected, as follows:

Claims 1, 3-6, 8, 15-17, and 19-23 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publn. 2001/0055356 to Davies, published December 27, 2001, filed June 27, 2001 (Davies), in view of U.S. Patent Publn. 2003/0100288 to Tomlinson, Jr. et al. published May 29, 2003, filed November 29, 2001.

Claim 13 has been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publn. 2002/0003792 to Schmidl et al., published January 10, 2002, filed February 5, 2001 (Schmidl) in view of Tomlinson.

Claims 2, 7, 9-12, 14 and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Davies, in view of Tomilson and further in view of U.S. Patent Publn. 2003/0147453 to Batra, published August 7, 2003, filed October 3, 2002 (“Barta”).

Applicants' Response

Before addressing this ground for rejection, the Applicants would like to draw the Examiner's attention to some of the novel and unobvious features of their claimed invention. The Applicants' claimed invention includes the steps of counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices and foregoing retransmission of the data packet when the number of consecutive times exceeds a predetermined threshold and acknowledgement transmission is detected from the each of the plurality devices except for the particular device.

U.S. 2001/0055356 to Davies discloses a multicast communication system in which any slave station may transmit a negative acknowledgement but only the primary stations may transmit a positive acknowledgement. Positive acknowledgements are transmitted in separate time slots, but negative acknowledgements transmitted by the secondary stations overlap the positive acknowledgements transmitted by primary stations. These negative acknowledgements corrupt reception of the positive acknowledgement by the master station, thereby ensuring that the data is retransmitted. There is no disclosure or suggestion by Davies of the Applicants' claimed steps of counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices and foregoing retransmission of the data packet when the number of consecutive times exceeds a predetermined threshold and acknowledgement transmission is detected from the each of the plurality devices except for the particular device.

U.S. 2003/0100288 to Tomlinson, Jr. discloses a dual transceiver for wirelessly broadcasting messages received on a power line communication system. Tomlinson mentions ultra wide band (UWB) in paragraph [0013]. However, there is no disclosure or suggestion by Davies of the Applicants' claimed steps of counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices and foregoing retransmission of the data packet when the number of consecutive times exceeds a predetermined threshold and acknowledgement transmission is detected from the each of the plurality devices except for the particular device.

Moreover, there is no disclosure or suggestion in the combination of Davies and Tomlinson, of the Applicants' claimed invention.

U.S. 2003/0147453 to Batra discloses adaptive hopping for a wireless device , which considers current channel conditions when creating the sequence of hop frequencies. The Examiner has cited paragraphs [0024], [0025], and [0029] in Batra, which the Examiner relies upon for a disclosure of foregoing retransmission of the data packet when the number of consecutive times exceeds a predetermined threshold and acknowledgement transmission is

detected from the each of the plurality devices except for the particular device. However, Batra does not disclose or suggest this feature claimed by the Applicants.

The cited section of Batra's paragraph [0024] reads:

"the master also numbers the communication channels."

The cited section of Batra's paragraph [0025] reads:

"after the frequency hops to its next value, the slave 74 responds with the acknowledgment packet using the new frequency. If the master does not receive the acknowledgment packet as expected, it resends its initial packet."

The cited section of Batra's paragraph [0029] reads:

"For example, if the power level on a channel exceeds a predetermined threshold, then it can be determined that the channel is bad, otherwise the channel is judged to be good. Another technique is to measure the packet error rate for each channel (or hop frequency). A counter could be implemented for each channel. When a packet error occurs the counter is increased (could be by more than 1) and when a packet is received correctly, the counter is decremented. The minimum value of the counters should be zero. When a counter exceeds a threshold, the channel is declared bad."

There is no disclosure or suggestion by Batra of the Applicants' claimed steps of counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices and foregoing retransmission of the data packet when the number of consecutive times exceeds a predetermined threshold and acknowledgement transmission is detected from the each of the plurality devices except for the particular device.

Moreover, there is no disclosure or suggestion in the combination of Davies, Tomlinson, and Batra of the Applicants' claimed invention.

U.S. 2002/0003792 to Schmidl et al. discloses selecting from an available frequency spectrum a frequency band whose communication quality is suitable for wireless communication at a desired rate. Probe packets can be transmitted on different frequencies (223) during a known period of time (T.sub.PLS), and frequency channel quality information can be obtained (225) from the probe packets. This quality information can then be used to select a desirable frequency

band (227). The communication quality of the selected band can also be used as basis for selecting (141) from among a plurality of modulation and coding combinations that are available for use in communications operations. The Examiner has cited paragraphs [0063], [0068], and [0069] in Schmidl, which the Examiner relies upon for a disclosure of a transmission controller configured to cause the retransmission buffer to send the retransmission packet to the plurality of devices when an acknowledgment is not detected for each of the plurality of devices.

The cited section of Schmidl paragraph [0063] reads as follows:

The master can communicate with multiple slaves in the same piconet, some slaves in mode 2 and others in mode 1, as shown in the exemplary WPAN of FIG. 7.

The cited section of Schmidl paragraph [0068] reads as follows:

In response to the CRC decoding operation, a controller 1206 generates either a negative (NAK) or positive (ACK) acknowledgment in the form of an ARQ packet for transmission to the other end. If the CRC checks correctly (ACK), then the controller 1206 signals buffer 1204 to pass the buffered data to a higher layer. On the other hand, if the CRC did not check correctly (NAK), then, in response to the negative acknowledgement, the other end will transmit the parity bits, which are input to the controller 1206 and buffered at 1204.

The cited section of Schmidl paragraph [0069] reads as follows:

In response to the CRC decoding operation, a controller 1206 generates either a negative (NAK) or positive (ACK) acknowledgment in the form of an ARQ packet for transmission to the other end. If the CRC checks correctly (ACK), then the controller 1206 signals buffer 1204 to pass the buffered data to a higher layer. On the other hand, if the CRC did not check correctly (NAK), then, in response to the negative acknowledgement, the other end will transmit the parity bits, which are input to the controller 1206 and buffered at 1204.

There is no disclosure or suggestion by Schmidl of the Applicants' claimed steps of counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices and foregoing retransmission of the data packet when the number of consecutive times exceeds a predetermined threshold and acknowledgement transmission is detected from the each of the plurality devices except for the particular device.

Moreover, there is no disclosure or suggestion in any combination of Davies, Tomlinson, Schmidl and Batra of the Applicants' claimed invention.

CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims and allowance of this application.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. 13-4500, Order No. 4208-4145. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No 13-4500, Order No. 4208-4145. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

Respectfully submitted,
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Dated: March 16, 2007 By:



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